

Screening for silent co-morbidities in children with overweight and obesity: tests, timing, and next steps
Children with BMI ≥85th percentile

	Screening: test and age	Normal	Weight Management ¹ (PCP oversight)	Specialty Referral
Dyslipidemia	Fasting lipid profile² Age ≥ 9 y Age 2-8 y if BMI ≥ 95 th %ile or if CV risk factors ³	LDL < 110 mg/dl (110-129 = borderline) TG < 90 mg/dl age ≥ 9 y (75 mg/dl age < 9 y) HDL < 45 mg/dl (40 - 45 mg/dl = borderline)	LDL < 160 mg/dl TG < 500 mg/dl HDL <45 mg/dl	COACH LDL ≥ 160 mg/dl AND/OR TG ≥ 500 mg/dl (on 2 occasions w/in 3 wks - 2 months)
NAFLD	ALT Age ≥ 9 y if BMI ≥ 95 th %ile Age ≥ 9 y if BMI ≥ 85 th %ile and risk factors ⁴ At age ≥ 3 years if ≥ 95 th %ile and risk factors ⁴	ALT < 22 U/dl (girls) (22-44 U/dl = borderline) ALT < 26 U/dl (boys) (26-52 U/dl = borderline)	ALT > 44 U/dl (girls) and > 52 U/dl (boys) Repeat within 3-6 months	GI > 44 or > 52 U/dl X 2 in 3-6 months Refer to COACH, not GI, if hgb a1c ≥ 6.0% is also present
Diabetes	Hgb a1c or fasting glucose Age ≥ 10 y or earlier if puberty onset	Hgb a1c <5.7% Fasting glucose < 100 mg/dl Prediabetes 100-125 mg/dl Diabetes ≥126 mg/dl	Hgb a1c < 6.0% Fasting glucose ≤ 100 mg/dl	COACH⁵ Hgb a1c ≥ 6.0% - 8.9% Hgb a1c ≥ 9% urgent: page the On Call Endocrinologist for appointment
Hypertension	Blood pressure elevation on 3 separate occasions 1-2 weeks apart Age ≥ 2 years (If automated BP is ≥ 90 th %ile, check manual. Confirm manual elevation w/ 2 more manuals at visit & average)	Use <i>.bpfawr</i> to identify age-, gender-, and height-specific cutpoints for Normal (<90 th %ile) Prehypertension (90 th -95 th or 120/80-95 th %ile in teens) Stage 1 (≥95 th) Stage 2 (≥99 th + 5 mm Hg)	Prehypertension and hypertension Low salt diet (< 2 g/day)	Renal Stage 1 in 4-6 wks Stage 2 no sx: urgent (1 wk) Stage 2 w/ sx: to ER

- Options for weight management include nutrition clinic (a series of 4 visits), Get Up and Go at the YMCA, and weight management focused encounters within the medical home/primary care office
- A non-fasting lipid profile can be performed. If non-HDL value < 145 (total cholesterol minus HDL), then no further testing is needed. If non-HDL ≥ 145 mg/dl, then proceed to fasting lipid profile. Abnormal fasting lipid profile should be confirmed with second fasting profile between 3 weeks and 2 months after initial result.
- CV risk factors: Parent, grandparent, aunt/uncle or sibling with premature CV disease (≤ 55 years for men, ≤ 65 years for women); parent with total cholesterol ≥ 240 or known dyslipidemia; or child with HTN, tobacco use, or diabetes
- NAFLD risk factors for early onset: severe obesity, family history, hypopituitarism, Latino background
- COACH preferentially uses hgb a1c rather than fasting glucose to classify diabetes risk. If a fasting glucose is performed and is elevated, please consider follow-up with hgb a1c.